

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 09.05.2013

Revision: 2902504235

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- **Date of compilation:** 08.02.2008
- **1.1 Product identifier**
- **Trade name:** *ABS-M30i Model*
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
*No further relevant information available.*
- **Application of the substance / the preparation:** *Filament for Stratasys® Inc. FDM™ modeler*
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer / Supplier:**  
*Stratasys, Inc. Tel +1 952 937 3000  
7665 Commerce Way Fax +1 952 937 0070  
Eden Prairie, MN 55344  
USA*
  
- **For information in Europe contact:**
- *C.S.B. GmbH Tel.: +49-2151-6520860  
Düsseldorfer Straße 113 Fax: +49-2151-6520869  
D-47809 Krefeld E-Mail: info@csb-online.de  
Germany*
- **E-mail address of the competent person responsible for the Safety Data Sheet:** *sdb@csb-online.de*
- **Informing department:** *Product safety department*
- **1.4 Emergency telephone number:** *As above or next toxicological information centre.*

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
*The product is not classified according to the CLP regulation.*
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC Void**
- **Classification system:**  
*The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.*
- **2.2 Label elements**
- **Labelling according to EU guidelines:**  
*The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EC" as issued in the last version.  
Observe all safety regulations when handling chemicals.*
- **Additional information:** *Void*
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*

**SECTION 3: Composition/information on ingredients**

- **3.2 Chemical characterization: Mixtures**
- **Description:** *Polymer*
- **Dangerous components:** *Void*
- **Other components:** *Thermoplastic acrylic copolymer*

GB

(Contd. on page 2)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 2902504235

Revision: 2902504235

**Trade name: ABS-M30i Model**

(Contd. of page 1)

**SECTION 4: First aid measures**

- **4.1 Description of first aid measures**
- **General information:** Remove contaminated clothing.
- **After inhalation:**  
Supply fresh air; consult doctor in case of symptoms.  
After inhalation of decomposition products, remove the affected person to a source of fresh air and keep calm. Provide medical aid.
- **After skin contact:**  
Wash with soap and water.  
If skin irritation continues, consult a doctor.  
After contact with the molten product, cool rapidly with cold water.  
Do not pull solidified product away from the skin.  
Call a doctor immediately.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.  
Remove contact lenses, if present and easy to do.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Do not induce vomiting!  
In case of persistent symptoms consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

**SECTION 5: Firefighting measures**

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**  
Water spray jet  
Foam
- **For safety reasons unsuitable extinguishing agents**  
Water with a full water jet.  
Carbon dioxide  
Extinguishing powder.  
ABC powder  
Lack of cooling capacity may permit re-ignition.
- **5.2 Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.  
Irritant gases/vapours  
Can be released in case of fire:  
Smoke  
Carbon monoxide (CO) and Carbon dioxide (CO<sub>2</sub>)  
Hydrocarbons  
Hydrogen cyanide (HCN)  
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information** If without risk possible, move drums with material away from dangerous area.

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Avoid causing dust.  
Do not breathe dust.

(Contd. on page 3)

GB

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 290504235

Revision: 290504235

**Trade name: ABS-M30i Model**

(Contd. of page 2)

- Remove all ignition sources.
- Avoid contact with eyes.
- Danger of slipping on leaked/spilled product.
- **6.2 Environmental precautions:** Do not allow to enter drainage system, surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
  - Allow to solidify. Collect mechanically.
  - Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**
  - See Section 8 for information on personal protection equipment.

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
  - Ensure good ventilation/exhaustion at the workplace.
  - Prevent formation of dust.
  - If dust/smoke is developed, avoid breathing dust/smoke.
  - Any deposit of dust which cannot be avoided must be removed regularly.
  - Avoid contact with skin and eyes.
  - Make sure that all applicable workplace limits are observed.
  - Avoid contact with hot product.
- **Information about protection against explosions and fires:**
  - Protect against electrostatic charges.
  - Keep ignition sources away - Do not smoke.
  - Protect from heat.
  - Risk of dust explosion if enriched with fine dust in presence of air.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**
  - Observe all local and national regulations for storage of water polluting products.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed containers.
- **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**
- **Components with critical values that require monitoring at the workplace:**
  - Observe all workplace limits for dust.
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
  - Keep away from foodstuffs, beverages and food.
  - Do not eat, drink or smoke while working.
  - Do not inhale dust / smoke / mist.
  - Avoid contact with the eyes and skin.
  - Wash hands during breaks and at the end of the work.
- **Breathing equipment:**
  - If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.
- **Protection of hands:**
  - No chemical-protective gloves required.
  - Use heat resistant gloves when handling hot/molten product.

(Contd. on page 4)

GB

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 2902504235

Revision: 2902504235

Trade name: ABS-M30i Model

(Contd. of page 3)

- **Eye protection:** Safety glasses
- **Body protection:** Wear heat-resistant protective clothing when handling hot/molten product.

### SECTION 9: Physical and chemical properties

#### · 9.1 Information on basic physical and chemical properties

##### · General Information

##### · Appearance:

Form:	solid
Colour:	different according to colour
Smell:	weak/faint
Odour threshold:	no data available

· pH-value: not applicable

##### · Change in condition

Melting point/Melting range:	not applicable
Boiling point/Boiling range:	not applicable

· Flash point: not determined

· Inflammability (solid, gaseous) combustible

· Ignition temperature: not determined

· Decomposition temperature: not determined

· Self-inflammability: Product is not selfigniting.

· Danger of explosion: Risk of dust explosion if enriched with fine dust in presence of air.

##### · Critical values for explosion:

Lower:	not determined
Upper:	not determined

· Oxidizing properties not applicable

· Vapor pressure: negligible

Density:	> 1 g/cm <sup>3</sup>
Relative density at 20 °C	> 1 (H <sub>2</sub> O = 1)
Vapour density (AIR = 1):	not determined
Evaporation rate	negligible

##### · Solubility in / Miscibility with

Water: insoluble

· Partition coefficient (n-octanol/water): not determined

##### · Viscosity:

dynamic:	not applicable
kinematic:	not applicable

· 9.2 Other information No further relevant information available.

### SECTION 10: Stability and reactivity

· 10.1 Reactivity see 10.3

· 10.2 Chemical stability

##### · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.  
Avoid impact, friction, heat, sparks, electrostatic charges.

· 10.3 Possibility of hazardous reactions Risk of dust explosion if enriched with fine dust in presence of air.

(Contd. on page 5)

GB

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 07.03.2013

Revision: 07.03.2013

**Trade name: ABS-M30i Model**

(Contd. of page 4)

- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Strong oxidizing agents
- **10.6 Hazardous decomposition products:**
  - Irritant gases/vapours
  - Poisonous gases/vapours
  - Smoke
  - Carbon monoxide (CO) and Carbon dioxide (CO<sub>2</sub>)
  - Hydrocarbons
  - Hydrogen cyanide (HCN)
  - Styrene
  - Aldehydes
  - Phenol
  - Acrylonitril
  - Nitrogen oxides (NO<sub>x</sub>)

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**  
estimated

Oral	LD50	> 5000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** Dust particles may mechanically irritate the skin.
- **on the eye:** Dust particles may mechanically irritate the eye.
- **Sensitization:** No sensitizing effect known.
- **Subacute to chronic toxicity:** no data available
- **Additional toxicological information:**  
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**  
According to present knowledge no CMR-effects known.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Disposal must be made according to official regulations.
- **Waste disposal key number:** According to local/national regulations.

(Contd. on page 6)

GB

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 07.03.2013

Revision: 07.03.2013

**Trade name: ABS-M30i Model**

(Contd. of page 5)

- **European waste catalogue:**  
Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

- |  |  |
|--|--|
| · <b>14.1 UN-Number</b><br>· <b>ADR, IMDG, IATA</b>                                    | Void   |
| · <b>14.2 UN proper shipping name</b><br>· <b>ADR, IMDG, IATA</b>                      | Void   |
| · <b>14.3 Transport hazard class(es)</b><br>· <b>ADR, IMDG, IATA</b><br>· <b>Class</b> | Void   |
| · <b>14.4 Packing group</b><br>· <b>ADR, IMDG, IATA</b>                                | Void   |
| · <b>14.5 Environmental hazards:</b>   | Not applicable.                                      |
| · <b>14.6 Special precautions for user</b>   | Not applicable.                                      |
| · <b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>  | Not applicable.                                      |
| · <b>Transport/Additional information:</b>   | Not dangerous according to the above specifications. |
| · <b>UN "Model Regulation":</b>  | -  |

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **National regulations**
  - **Decree to be applied in case of technical fault:** Directive 96/82/EC does not apply.
  - **Other regulations, limitations and prohibitive regulations**
- Product resp. its monomers are listed in:
- Toxic Substance Control Act TSCA (USA)
  - EINECS (Europe)
  - Canadian Domestic Substance List DSL (Canada)
  - Existing and New Chemical Substance List ENCS (Japan)
  - Korean Existing Chemicals List KECL
  - Australian Inventory of Chemical Substances AICS (Australia)
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:**  
C.S.B. GmbH  
Düsseldorfer Str. 113  
47809 Krefeld / Germany

Phone: +49 - 2151 - 652086-0  
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(Contd. on page 7)

-GB-

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 07.03.2013

Revision: 07.03.2013

**Trade name: ABS-M30i Model**

(Contd. of page 6)

**· Abbreviations and acronyms:**

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*IATA: International Air Transport Association*

*GHS: Globally Harmonized System of Classification and Labelling of Chemicals*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

**· Sources:** *These data are based on information submitted by pre-suppliers.*

GB